To: Wilbur, Emily[emily.wilbur@dnr.mo.gov]

Cc: Hawkins, Andy[hawkins.andy@epa.gov]; Keas, Ashley[Ashley.Keas@dnr.mo.gov]

From: Avey, Lance

Sent: Tue 12/22/2015 3:26:02 PM

Subject: RE: Ameren modeling information for Labadie

Thanks Emily,

I appreciate the response and explanation. All three method (fixed, standard, actual) are ok; with using afcm preferred if accurate information is available.

I did have a couple more questions. Would I be able to obtain from you the most recent RATA report? Are any other measurements besides temperature available? Like static pressure within the stack or barometric pressure? And lastly, where within the stack is the temperature measurement taken?

Thanks again for your help,

Lance

Lance Avey

EPA Region 7

11201 Renner Boulevard

Lenexa, Kansas 66219

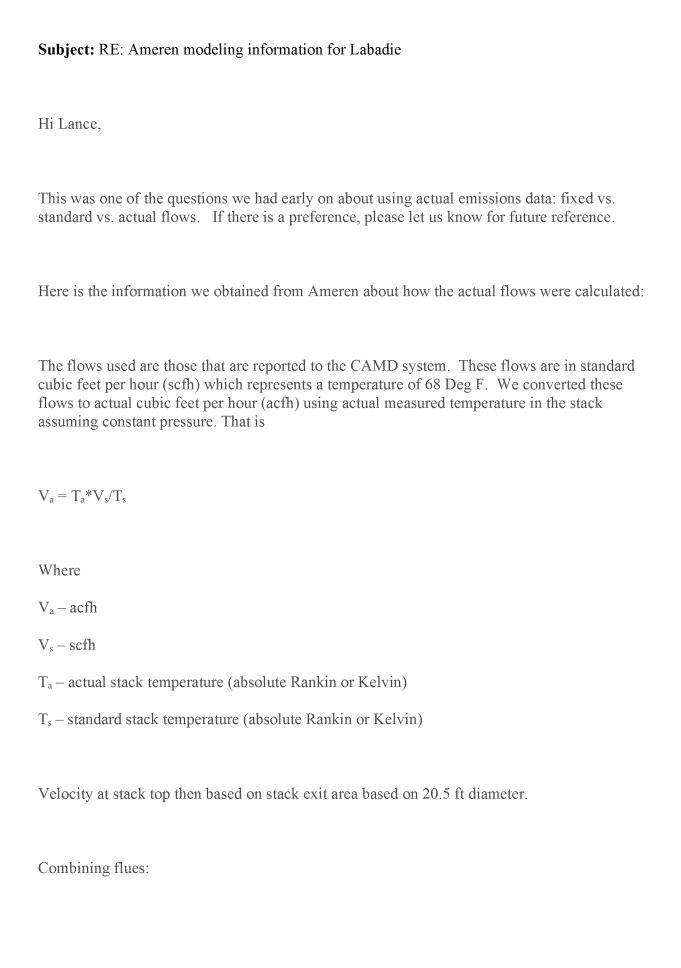
(913) 551-7809

avey.lance@epa.gov

From: Wilbur, Emily [mailto:emily.wilbur@dnr.mo.gov]

Sent: Monday, December 21, 2015 1:58 PM **To:** Avey, Lance < Avey. Lance @epa.gov>

Cc: Hawkins, Andy hawkins.andy@epa.gov; Keas, Ashley Ashley.Keas@dnr.mo.gov



- 1) Emission rate: The emission rate for Unit 3 and Unit 4 were summed.
- 2) Temperature: The combined temperature for Units 3 and 4 was calculated from the weighted average of the (Unit 3 temperature * Unit 3 velocity) + (Unit 4 temperature * Unit 4 velocity) / (Unit 3 velocity + Unit 4 velocity)
- 3) Velocity: The combined velocity for Units 3 and 4 was calculated from the sum of the Unit 3 and 4 velocities * (pi * (6.25 (single flue diameter)^2) / (pi * 8.84 (equivalent dual flue diameter)^2)

Please let me know if you have any questions.

Thanks,

Emily

From: Avey, Lance [mailto:Avey.Lance@epa.gov]
Sent: Friday, December 18, 2015 8:53 AM

To: Wilbur, Emily **Cc:** Hawkins, Andy

Subject: Ameren modeling information for Labadie

Hi Emily,

As we continue to evaluate the sets on modeling inputs we have received for Labadie for 1-hr SO2, we are seeing some differences in the modeled inputs. Of note, the flow rates and thus exit velocities used are different for the provided modeling from MDNR, Sierra Club, and Ameren. MDNR used fixed exit velocities, SC used varying rates from CAMD, and Ameren used varying rates of which we are looking to confirm how Ameren's values were calculated.

Could you supply the calculation methodology for the exit velocities for the Ameren values and have them include all hourly parameters that were used in their calculation?

Thanks much,

Lance

Lance Avey

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